is of value; indeed such evidence that does exist suggests that for some groups it may do harm.[7] No information is given about the training and expertise of these telephone supercounsellors and how general practitioners are expected to cope with this splitting of care. In explaining the rationale for this intervention the bald statement "government commitment" suffices.

It is only when the reference group is allowed full scope for its expertise that things improve. The proposals for a national support structure to underpin improvements are excellent. Similarly, the intention to integrate health and social services for mental health and to provide more support for carers and their needs are based on genuinely sound evidence[8 9] and deserves commendation. But even here the recommendations are infiltrated by dogma. The obsession with risk reduction despite no real evidence that it is attainable[10] and slavish adherence to an ill defined intervention called assertive outreach with 24 hour cover despite evidence of lack of efficacy of this type of approach in the United Kingdom[11] shows that it takes little to trump evidence based medicine, despite it being at the supposed heart of clinical governance.

Supporting the aims of clinical governance and improved quality in the NHS are possible but not helped by the overblown language of this document. Oyebode et al probably reflect mainstream mental health opinion in supporting the more modest belief that, when correctly used, the measures associated with clinical governance should "help to steer the interests of clinicians and managers to the common end of improving clinical care."[12] Getting more appropriate standards that are commensurate with better care rather than promoting the wish lists of focus groups will determine whether the scaffold of the national framework becomes a genuine support for healthy growth or a raised platform for the execution of hollow promises that should never have been made.

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Accidents that should never have happened

When technology to prevent accidents exists it should be used

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Early one October morning an express slammed obliquely into the side of another train.[1] By all precautions they should not have been sharing the same piece of track, and 20 seconds earlier or later they would not have collided. The ensuing fire consumed the bodies of many passengers and injured many more, and for days no one was sure exactly how many perished.[2] The subsequent inquiry was full of discussion about human error, blame, fire prevention, and automatic train protection.[3]

This was not last week outside Paddington, when two commuter trains collided and burst into flames, but October 1928, when the Derby to Bristol mail train of London, Midland and Scottish Railways struck a Great Western goods train at Charfield, Gloucestershire. In December 1928 the official inquiry into the Charfield crash called for the "eventual" installation of automatic train control, which could have stopped the train: 71 years later we are still waiting for it to be implemented.

The memorial in Charfield churchyard bears the name of Philip Jenkins, probably the first person to be the subject of an inquest under section 18 of the 1926 Coroners Act, one held where no body has been found. The fire at Charfield was so intense that only Mr Jenkins's crepe rubber shoe sole was left for identification.[4] The coroner's medical expert was Dr Walshman Ward, a local general practitioner, and it was his forensic skills that identified the remains of two children among the incinerated dead. Despite suggestions put to him that one of these bodies may have been that of Mr Jenkins, he defended his opinion, though the children remain unclaimed and unidentified to this day.

Colonel J W Pringle headed the inquiry and blamed the mail train driver, Ernest Aldington, for passing signals at danger. The testimony of both Aldington and his fireman was that the signals were clear. Pringle recommended installation of automatic train control to protect the train against any human error. The question of the rail companies perhaps being at fault never arose. Aldington was committed for trial for manslaughter by the coroner's injury, but in view of the magistrate's contrary finding that Aldington had no case to answer,[5] the crown offered no evidence at his trial and he was formally acquitted in February 1929.[6]

In view of the recent allegations concerning the failure of Great Western Trains to ensure the use of its existing automatic train protection system, which might have prevented the 1996 Southall railway disaster,[7] it is ironic that it was the company's ancestor, Great Western Railways, which first introduced such protection, even before the first world war.[8] The system did two things: a ramp on the track a quarter mile before a

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signal at "danger" would physically lift a shoe on the locomotive, tripping the brake vacuum valve to activate the brakes and sounding a warning siren in the cab.* Only if an electric current was running to the ramp, and was collected by the shoe, would the brake valve stay closed and an "all clear" bell sound to allow the driver to continue. Although Great Western Railways progressively installed the system on all its lines and trains the company had no influence over others, which chose not to follow suit.

In 1915 fire after a collision at Quintinshill led to Britain's worst ever casualty toll in a railway incident: 227 dead and almost 200 injured. Two signalmen changing shifts allowed a fast, heavily laden troop train to enter a section of line already occupied by a stationary local train. Worse still, an express from London was also accepted, which then ploughed into the wreckage, spilling hot coals on to the ruptured gas pipes of the coaches. The conflagration consumed many of the victims without trace. The signalmen were convicted of manslaughter and jailed, but, as Kitchenside points out in his account of the tragedy, "the technology that could have prevented the accident, in the form of track circuits, was by then available to the railway owners. . .had they been willing to pay for it."[9]

Since the 1930s, when gas lighting was phased out, major fires after railway accidents have usually been confined to those involving fuel tankers, as happened at Eccles in 1984 and in the Pennine Summit tunnel in the same year.[8 10] A fire in a sleeper train between Tiverton and Taunton in 1978 caused 12 deaths and 15 casualties owing to carbon monoxide poisoning, but until this month any casualties from fire have been light. We may have become too complacent about the risk of fire, even within the emergency services.[11]

The collision at Ladbroke Grove, just outside Paddington Station, on 5 October[12] bears many similarities in layout to that at Southall, on the same section of track three years earlier.[7] However, the Southall incident happened at a much higher closing speed, did not result in a fire, and was associated with a lower injury and fatality rate. The engineering and design failures which removed the protection from fire in the most recent incident will need as much scrutiny as the cause of the collision itself. The recent disaster belongs to the first third of the twentieth century, not the last year of it.

Any tendency for blame to be directed towards individuals will inevitably deflect attention from the basic economic issues which have always dogged railway safety. Many countries, including France, Germany, and Japan have successful high speed railway systems with fully automatic train protection, and despite occasional derailments they maintain a good safety record. The excuse that the technology is difficult to apply to existing British networks wears thin, considering that some of these overseas systems have been in place for nearly forty years.[9]

Earlier this month Coupland reviewed the duties of health professionals in reporting the medical consequences of weapon technology.[13] We have the same duty to report on behalf of the public the preventable injuries caused by disasters and to "call time" when the lessons of the past are being ignored.

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*Train brakes are "on" at rest and have to be actively released by means of a vacuum-operated system. Any interruption of the vacuum reapplies the brakes.

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Radiation risks

Appropriate decisions come from valid data, not inaccurate perceptions of risk

At a conversation with friends about last month's accident at the JCO uranium processing plant at Tokaimura, Japan,[1] one of them said, "but nuclear power has a very safe record." He was right, but in 20 years of studying radiation risks this was the first time I had heard anyone not involved in the nuclear industry or with radiation in some other way say anything nice about nuclear power.

The origins of public mistrust of nuclear power are easy to understand. Its beginnings are closely connected with nuclear weapons, undoubtedly terrible things. An atmosphere of secrecy and deception also existed in those early days: not even the cabinet was informed about the decision to build the British bomb.[2] In addition there have been spectacular accidents such as Chernobyl, Three Mile Island, and the 1957 Windscale fire. All have caused alarm disproportionate to their measurable harm, perhaps in the way that crashes of crowded commuter trains inspire more dread than a steady (and in total much larger) trickle of road deaths. This history, plus the fact that any risk associated with nuclear power is usually perceived as imposed rather

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